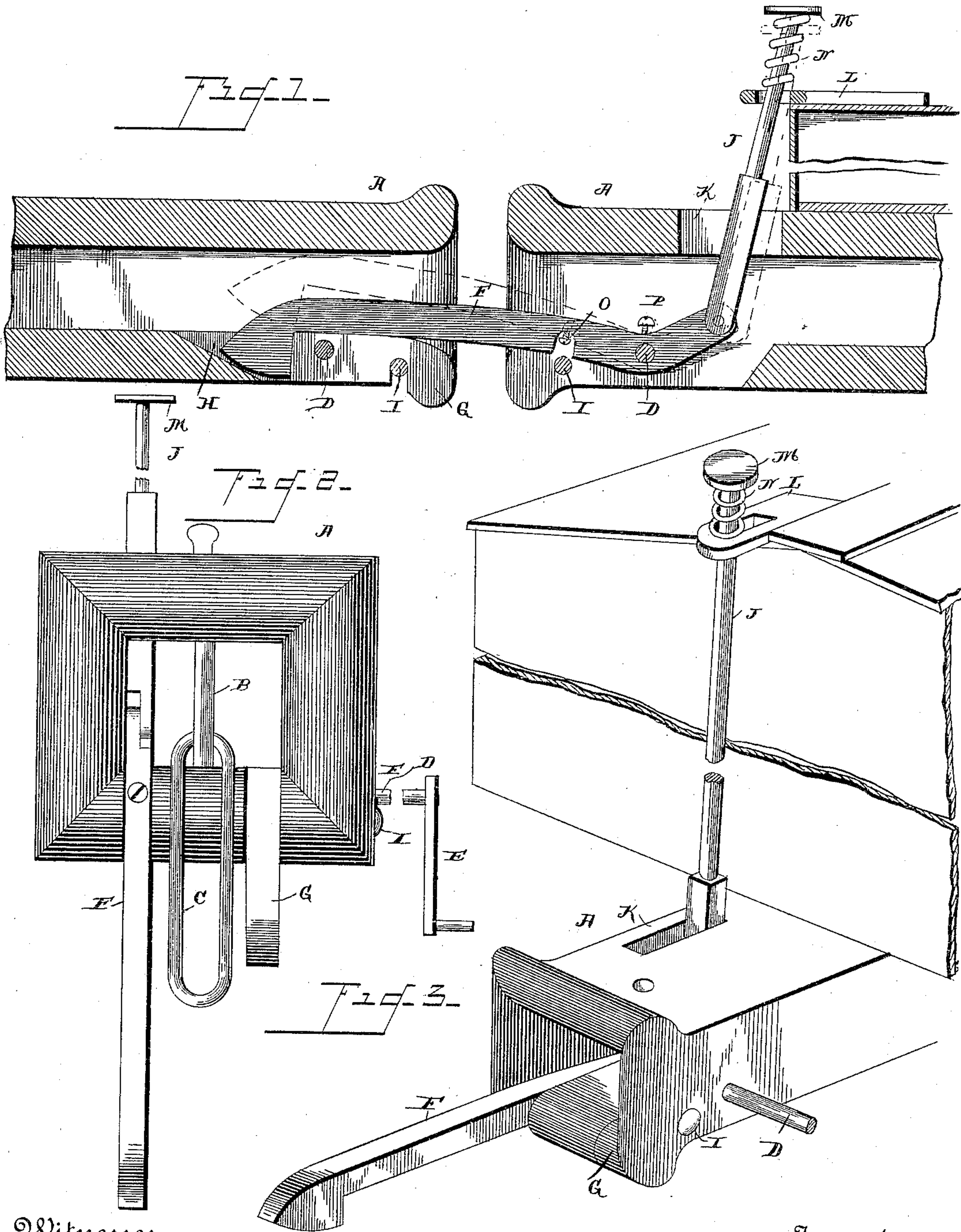


(No Model.)

O. JENNINGS.
CAR COUPLING.

No. 431,145.

Patented July 1, 1890.



Witnesses
Geo. C. Fitch.

Inventor
Owen Jennings

By his Attorneys
N. L. Collamer. *C. A. Snow & Co.*

UNITED STATES PATENT OFFICE.

OWEN JENNINGS, OF HOMER, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 431,145, dated July 1, 1890.

Application filed March 29, 1890. Serial No. 345,814. (No model.)

To all whom it may concern:

Be it known that I, OWEN JENNINGS, a citizen of the United States, residing at Homer, in the parish of Claiborne and State of Louisiana, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, more especially of that class known as "hook and catch."

The object of the invention is to provide a pivoted hook and a catch mounted on the operating-bar thereof, and hence also pivoted, by means of which both hooks of the coupled cars can be disengaged simultaneously from either side or from the top of either car. This object I accomplish by my improved car-coupling, which consists, essentially, of a horizontal rock-shaft journaled in the draw-head below the hole therein, a hook and a catch secured thereto, a removable pin for preventing these parts from falling too low, and operating devices leading to each side and to the top of the car, and adjunctive and specific details of construction incident to this arrangement of parts, as well as of certain auxiliaries which tend to enhance the value of the complete device, all as hereinafter more fully described, and as are illustrated in the accompanying drawings, in which—

Figure 1 is a longitudinal section of two of my improved car-couplings connected, the dotted lines showing the manner in which the uncoupling is effected. Fig. 2 is a front elevation of one of the draw-heads in a position to engage the link of an ordinary car-coupling. Fig. 3 is a perspective view of one of the draw-heads with the parts in their normal position.

Referring to the accompanying drawings, A designates a draw-head, and B C the ordinary pin and link therein.

D is a shaft journaled horizontally through the body of the draw-head below the hole therein and operated by cranks E at its lateral extremities, and F is a hook secured upon said shaft and turning in unison with the cranks E, all as is common in car-couplings of this character. The hook F is located at one side of the opening in the draw-head and within a recess or notch through the bottom thereof, and at the other side of the draw-head, in a

similar but slightly-broader notch, stands a catch G, which is also secured to the shaft D, and whose front end is rounded, as shown in Fig. 3, to conform with the general outline of the forward end of the draw-head when the parts are in their normal position. The rear end of the catch G extends slightly beyond the shaft D, and in rear thereof a depression H is made in the bottom of the draw-head. The ordinary pin B passes vertically through holes in the draw-head and stands between the catch on one side and the hook at the other side thereof. When two draw-heads of this character are brought together, each of the hooks F rides over the opposite catch G and falls into the depression H in rear thereof, as shown in Fig. 1. To uncouple the device one of the cranks E is operated in the proper direction, whereby both its hook and its catch will be raised. The former will be disengaged from the opposite catch, and the latter will raise the body of the opposite hook, so that the head thereof will disengage the rear end of the catch.

I preferably provide the draw-head near its front end in its lower side with a transverse hole, and through this hole passes a pin I. The lower side of the hook and of the catch are cut away to engage over this pin, and the latter therefore retains these parts in their normal position, Fig. 3, when in place, but permits them to rise as necessity requires. The pin I may be withdrawn, and the parts will then fall to the position shown in Fig. 2, the object being that the hook shall not project from the end of the draw-head and strike the draw-head, platform, or body of the opposite car, which would prevent the latter connecting with an ordinary pin and link. Hooks have heretofore been elevated for this purpose, but it was found that such couplings could not always be used successfully, because the hooks, when so elevated, struck the platform or body of the car; hence I have provided means for dropping the hooks herein.

In order that this improved car-coupling may be operated from the platform of a passenger or the top of a freight car, I provide the rod J, which is pivotally connected to the hook F in rear of its point of support, which rod passes through a slot K in the top of the

draw-head and extends upwardly through a guide or eye L, carried by the platform or top of the car, as the case may be. The upper end of this rod is provided with a foot-piece M, and when a downward pressure is given this foot-piece the forward ends of the hook and of the catch will be thrown upwardly, the same as if they were operated by one of the cranks E. To support the weight of the rod J, I provide a spring N, preferably of the form shown—i. e., coiled upon the body of the rod between the eye L and the foot-piece M. This spring draws the rod upwardly, and if it be strong enough to have any effect on the hook it throws the free end of the latter downwardly by turning it around its support, which motion is desirable. As the hook is subjected to many knocks and bruises and is liable to be worn by rough usage, it may occur in time that its free end or head will not drop sufficiently low in the companion draw-head to engage the catch of the latter; or it may occur that the draw-heads of a certain car are found, when that car is put upon the track, to stand a trifle above the draw-heads of the balance of the rolling-stock, or perhaps a little below them. In order, therefore, to adjust the position of the head of the hook with a great degree of nicety, I seat a screw O in the bottom of the notch in the hook that engages the transverse removable pin I. The head of this screw strikes upon said pin when the hook is lowered, whereas the catch G falls completely into engagement with the pin I. To adjust the angle of the hook upon its supporting rod or shaft D, the set-screw P, by which it is keyed thereto, is loosened and the adjusting-screw O is turned in or out to render the notch in the hook deeper or shallower, as may be desired, after which the set-screw P is again tightened in a manner which will be readily understood. The notch in the under side of the catch may be also provided with one of these adjusting-screws, if preferred, although I have not illustrated it because I do not deem it necessary or desirable.

What I claim is—

1. In a car-coupling, a hook at one side and a long catch at the other side of the draw-head, both parts being mounted near their rear ends upon and operated by the same shaft journaled through the bottom of the draw-head, substantially as described.

2. In a car-coupling, the combination, with the draw-head, a horizontal shaft journaled through the bottom thereof, a hook and a catch secured to said shaft at opposite sides of the opening in the draw-head, and means for operating said shaft, of a removable pin standing beneath said hook and catch in front of said shaft, and an ordinary pin-and-link coupling device, substantially as described.

3. In a car-coupling, the combination, with an oscillating shaft, a hook thereon, and a set-screw for holding the hook in position, of a supporting-pin forward of said shaft, and an adjusting-screw in said hook, its head bearing upon said pin, as and for the purpose set forth.

4. In a car-coupling, the combination, with the draw-head having a hole in its body provided with a notch at each side thereof through the bottom, and a depression in rear of one of said notches, of a shaft journaled transversely through the bottom and through said notches, means for oscillating this shaft, a hook secured thereon within one notch and a catch within the other, the catch in rear of said shaft having a square rear face standing in front of said depression, the whole operating as set forth.

5. In a car-coupling, the combination, with the draw-head, a shaft journaled transversely through the bottom of the same, and crank-arms at the extremities of said shaft, of a hook and a catch mounted upon said shaft, their bodies standing normally forward thereof in notches through the bottom of the draw-head, and the front face of the catch being rounded and its rear end squared, all as and for the purpose set forth.

6. In a car-coupling, the combination, with a shaft journaled in the draw-head, a hook mounted on said shaft, and a removable pin forward of the shaft upon which the hook rests, of a rod pivoted to the hook in rear of the shaft and passing upwardly through a slot in the draw-head, a foot-piece at the upper end of said rod, an eye carried by the car and embracing said rod, and a coiled spring between said foot-piece and eye, substantially as described.

7. In a car-coupling, the combination, with a hook pivoted on a transverse shaft in the draw-head, and means, substantially as described, for supporting the front end of said hook, of a rod connected to the hook in rear of its pivot and leading thence upwardly, a guide for said rod, a spring for supporting it, and a foot-piece at the upper end thereof, as set forth.

8. In a car-coupling, the combination, with the draw-head having an ordinary pin-and-link coupling device, of a hook pivoted in the bottom of said draw-head and normally projecting beyond the mouth thereof, and means, substantially as described, for operating said hook and for dropping it to a pendent position, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

OWEN JENNINGS.

Witnesses:

J. H. SIMMONS,
TOM HARRIS.